DOCUMENT RESUME

ED 253 663 CE 040 599

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TITLE Career Education for Mentally Handicapped Adults. Discussion Paper 01/83.
INSTITUTION British Columbia Dept. of Education, Victoria.
REPORT NO ISBN-0-7719-9234-3
PUB DATE Mar 83
NOTE 83p.
PUB TYPE Information Analyses (070) -- Collected Works - Serials (022) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Adult Education; *Adult Programs; Articulation (Education); *Career Education; Change Strategies; Classroom Techniques; Coordination; Daily Living Skills; Delivery Systems; *Educational Needs; Educational Objectives; Educational Policy; Educational Practices; Evaluation Criteria; Financial Support; Foreign Countries; Glossaries; Job Placement; Job Skills; Job Training; Linking Agents; *Mental Retardation; Models; Needs Assessment; Normalization (Handicapped); Policy Formation; Postsecondary Education; Program Effectiveness; Referral; Retraining; Services; Special Education; Student Placement; Student Recruitment; Teaching Methods; Vocational Adjustment; *Vocational Rehabilitation
IDENTIFIERS *British Columbia; Regional Surveys

ABSTRACT

A study examined the career education opportunities available to mentally handicapped adults in British Columbia. The primary objectives of the study were to assess the effectiveness of various methods and models in meeting the needs of mentally handicapped adults, to explore the policy implications of the program strengths and weaknesses, to identify the linkages and overlaps of vocational rehabilitation services provided for mentally handicapped adults, and to propose a method of providing coordinated and comprehensive career education services to all mentally handicapped adults who demonstrate a need for such services. Data from the British Columbia Health Surveillance Registry were used to estimate the career education needs of persons with mild, moderate, and severe and profound mental retardation. After analyzing the data, the researchers formulated a model of a comprehensive career education program for adults with varying degrees of mental retardation. Addressed in the model were the following program areas: recruitment and referral; student selection; life skills, work adjustment, and vocational skills training; job placement; job stabilization; and retraining. The study also resulted in the formulation of 14 policy recommendations pertaining to program priority areas, guidelines, funding, evaluation criteria, coordination, and articulation. (MN)

ED253663

PROVINCE OF BRITISH COLUMBIA

MINISTRY OF EDUCATION

DISCUSSION PAPER 01/83:

# CAREER EDUCATION FOR MENTALLY HANDICAPPED ADULTS

Prepared by:

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consultation with the
Career Education for
Mentally Handicapped Adults
Advisory Committee,
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March, 1983

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CE040599

**Canadian Cataloguing in Publication Data**

Lindsay, Janis.
Career education for mentally handicapped adults

(Discussion paper, ISSN 0228-5614 ; 01/83)

Bibliography: p.
ISBN 0-7719-9234-3

1. Mentally handicapped - Education - British Columbia. 2. Mentally handicapped - Rehabilitation - British Columbia. 3. Career education. I. British Columbia. Ministry of Education. II. Title. III. Series: Discussion paper (British Columbia. Ministry of Education) ; 83/01.

LC4815.L56 371.92'8 C83092175-3

DISCUSSION PAPER 01/83

**CAREER EDUCATION FOR MENTALLY HANDICAPPED ADULTS**

The following is a discussion paper intended to obtain reaction to the ideas presented.

You are encouraged to complete, detach, and mail this form to the Continuing Education Division, Ministry of Education, 835 Humboldt Street, Victoria, B.C. V8V 2M4. Please do so by June 15, 1983.

Comments: _____

CUT ALONG LINE AND DETACH

## CAREER EDUCATION FOR MENTALLY HANDICAPPED ADULTS

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## SUMMARY AND RECOMMENDATIONS

### A) SUMMARY

Career education is a vital component of the integration process that allows mentally handicapped adults to become accepted and valued members of society. Through career education mentally handicapped adults can acquire skills that enable them to achieve independence and self-worth.

In the past five years the adult public education system in British Columbia has gradually responded to the right and need of mentally handicapped adults for career education. Many colleges, school districts and institutes have made educational services more accessible to mentally handicapped adults and have developed new courses to address specialized educational needs. Experience to date has shown that the effectiveness of career education for the mentally handicapped is most dependent on instructional techniques and support services that allow newly acquired skills to be used in the community.

A survey undertaken for this paper identified the need for support services as one of the primary concerns of adult special education educators. The need for increased program options, in particular vocational skill training, was also identified as a major area of concern.

This paper puts forth the concept of comprehensive career education. The role of various government ministries in the habilitation of mentally handicapped adults is discussed in light of current research and the present situation in British Columbia. The paper also examines a number of skill development program options and delivery models.

Research undertaken for this paper offered support for the view that given the diversity of learning needs and learning styles that exist within the mentally handicapped adult population, and given the need for co-ordination of vocational rehabilitation services provided by a variety of government ministries, the adult public education system must provide a framework for comprehensive delivery of career education to mentally handicapped adults.

B) RECOMMMENDATIONS

In its March, 1982, policy statement on Adult Special Education, the Ministry of Education recognized its responsibility to encourage and assist public educational instituions in the provision of appropriate educational opportunities for those disabled adults who can benefit from them. In order to fulfill this responsibility, it is recommended that the Ministry:

1. Continue to designate all Adult Special Education progams in colleges and institutes as Provincial priority programs, clearly indicating that the provision of such educational opportunities is an essential and critical component of the public education system;

2. Develop guidelines for its Adult Special Education policy which will encourage and support the efforts of public education institutions to offer a more equitable and comprehensive range of career education programs and services for mentally handicapped adults;

3. Develop its funding system so as to enable public educational institutions to provide an appropriate range of career education programs for mentally handicapped adults and specifically support, for a period of three years, at one or more public education institutions, demonstrations of comprehensive career education services for mentally handicapped adults as described in this

paper;

4. Make much greater use of the Vocational Rehabilitation for Disabled Persons Agreement as well as other funding sources both Provincial and Federal, to increase the amount of educational dollars which are available for career education for mentally handicapped adults;

5. Develop measures for effectiveness and efficiency for career education programs for mentally handicapped adults which recognize the need to design these programs to meet the individual needs of those enrolled, to have appropriate student-teacher ratios and to be evaluated in terms of their contribution to increased capacities for independent living;

6. Initiate, on a Provincial level, an inter-ministerial committee, consisting of the Ministries of Labour, Human Resources and Health as well as the Canadian Employment and Immigration Commission, to coordinate all relevant activities that relate to the career education of mentally handicapped adults;

7. Coordinate and articulate career education at both the post-secondary and schools levels with a view to establishing a continuum of services available to mentally handicapped adults;

8. Enhance its capacity to provide leadership, coordination and evaluation of career eduation programs for mentally handicapped adults;

It is further recommended that the Ministry of Education encourage public educational institutions to:

1. Develop formal policy statements on the education of disabled adults;

2. Provide a range of career education programs for mentally handicapped adults, offer these programs in educational settings and make normal college support services such as counselling fully available to the students in these programs;

3. Provide proper educational assessment and individualized student planning services for mentally handicapped adults in career education programs;

4. Coordinate their activities with the Ministries of Labour and Human Resources as well as Canada Employment to ensure that appropriate job placement and job stabilization services are available;

5. Initiate, through the colleges, regional career education for mentally handicapped adults coordinating committees which would include appropriate public and private agencies and associations as well as employers and representatives of labour unions; and

6. Provide adequate and appropriate career education opportunities to mentally handicapped adults in residential institutions on the same basis as they are provided otherwise.

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## I. INTRODUCTION

Throughout history mentally handicapped persons have been devalued by a society that places a premium on physical and mental prowess and monetary achievement. The devaluation of persons with a mental handicap was most evident during the 19th century when it was common practice to shunt the mentally handicapped into restrictive, segregated facilities with little or no learning opportunities. At a time when Puritan ethics espoused the value of work and the evils of idleness the mentally handicapped were denied any opportunity to be involved in a productive activity. Once handicapped people had been trapped in segregated facilities, misconceptions and prejudices regarding the mentally handicapped were permitted to flourish unquestioned until recent time.

In the latter half of the 19th century, encouraged by the general feeling of society that welfare should be earned and idle hands should be kept busy, charitable organizations and societies began employing the poor and handicapped in workshops to produce goods for the needy. By the turn of the century the Salvation Army and Goodwill Industries had established work programs designed mainly for assisting the poor but which also provided some employment for the handicapped. During the twentieth century sheltered workshops became a way of life for the mentally handicapped and allowed an ever increasing number of mentally handicapped persons to be retained in the community. The opportunity to be viewed in a more challenging environment, coupled with improved educational opportunities, contributed greatly to dispelling the misconceptions and

prejudices that previously had severely limited the lives of the mentally handicapped. For the mentally handicapped, the opportunity to work in sheltered workshops was the first available means for gaining value as a member of society.

In the early 70's the normalization concept, i.e. letting the mentally handicapped obtain an existence as close to normal as possible (Bank-Mikkelson, 1969), further projected work as an important value in the lives of the mentally handicapped, as a means of obtaining a normalized daily living pattern and greater human dignity in today's society. However, the normalization concept also emphasized the importance of mentally handicapped persons having an opportunity to work in regular, non-sheltered work environments, and in turn pointed to the need of mentally handicapped persons to have the opportunity to learn marketable job skills.

The opportunity and right of mentally handicapped persons to work is strongly supported by the British Columbia Association for the Mentally Retarded. In a B.C.A.M.R. publication entitled: Work and Employment for Persons with Mental Handicaps: Problems and Guiding Principles, it is stated:

> "Work is a valued and normal activity for people in our society. The right and opportunity to work should be an option for all citizens, including persons with a severe and profound handicap." (Vocational Services Committee, 1981,p.6).

In today's society, work is a means of establishing an identity, of being self-supporting, and it provides an opportunity for personal growth. Having a job is one way of becoming a valued person. This relationship between work and value is supported by Marc Gold's theory of normalcy, which states: "Normalcy is a balance between a person's competence and deviance; competence being something that not everyone has but that is wanted and needed by other people and deviance being behaviors that bring negative reactions."[1] In order to achieve acceptance as valued persons, mentally handicapped adults require educational programs which reduce deviance and increase competence.

In addition to the philosophical argument for provision of career education programs for mentally handicapped adults, there is also a very strong economic argument. In an extensive cost-benefit analysis, R. W. Conley (1973) found the "rehabilitation of the retarded is worthwhile in most cases on the grounds of increased earnings alone."[2]

1. Video types of the Marc Gold Workshops, Vancouver, 1977, Societal Perspectives, B.C. Association for the Mentally Retarded, Vancouver.
2. Conley, R. W., The Economics of Mental Retardation, John Hopkins University Press, 1973, p. 288.

Conley determined that each dollar expended on the vocational rehabilitation of a mildly handicapped male under 25 years of age increased the present value (in 1972 dollars) of his estimated earnings by over $14. Among mildly handicapped young women, the comparable figure was approximately $8. These ratios declined among older and more severely handicapped individuals, but in all cases studied they were equal to or greater than the critical value of one.

The estimated cost of institutionalization (in 1972 dollars) of a handicapped individual for a lifetime is $400,000. In contrast Conley showed that a mildly handicapped male entering the work force at 18 years of age in 1970 could expect life-time earnings of $600,000 (1972 dollars.)

Mentally handicapped adults have a need and right to work. A number of research and demonstration projects have shown that even those labelled severely handicapped are capable of performing vocational tasks at a productivity level comparable to that found in industry (Gold 1972; Bellamy, Peterson and Close 1975; Martin and Flexer, 1978). The challenge facing the public education system in British Columbia today is to develop education programs that will assist mentally handicapped adults to maximize their vocational potential and to design program delivery systems that facilitate the movement of the mentally handicapped to competitive employment or sheltered employment in an integrated setting.

## II. PURPOSE

In the past five years there has been significant development of career education opportunities for mentally handicapped adults provided by colleges, institutes and school districts throughout the province of British Columbia. In 1981 the Ministry of Education provided colleges and institutes with adult special education initiative funds which allowed further expansion of educational opportunities for mentally handicapped adults. In 1979 the Ministry of Human Resources initiated a program which provides independent living skills instruction for mentally handicapped adults integrating into the community. Voluntary agencies have advocated the movement of mentally handicapped adults to more independent lifestyles and from sheltered workshops to employment in integrated settings. Other ministries such as Labour, Health and the Canada Employment and Immigration Comission have expanded their training opportunities to include the mentally handicapped.

The rapid growth of career education opportunities for the mentally handicapped has raised a number of issues that must be addressed and has pointed to a need to establish guidelines for future development. The Ministry of Education in partnership with East Kootenay Community College initiated the research and writing of this discussion paper as a means of:

- examining newly developed educational opportunities for mentally handicapped adults in light of current research findings regarding the effectiveness of various instructional methods and models in meeting the educational needs of mentally handicapped adults.

- exploring the implications of the adult special education policy statement issues by the Ministry of Education in March, 1982.

- identifying the linkages and overlaps of vocational rehabilitation services provided for mentally handicapped adults by various Ministries and agencies.

- proposing a method of providing co-ordinated, comprehensive and effective career education services to all mentally handicapped adults who demonstrate a need for these services.

III. DEFINITION

The focus of this paper will be on the educational needs of mentally handicapped adults. Mentally handicapped adults are defined as persons who possess problems with intellectual and adaptive functioning that significantly interfere with their ability to learn through commonly used teaching and class management procedures. The expectations of adaptive functioning vary for different age groups. It has been found that "in the adult years vocational performance and social responsibilities assume prime importance", and that "these are assessed in terms of the degree to which the individual is able to maintain himself independently in the community and in gainful employment as well as by his ability to meet and conform to standards set by the community".[3]

It has been estimated by the World Health Organization (C.A.M.R., 1980) that 3% of any population is labelled "mentally handicapped" at sometime in their life (statistical estimate). Whereas, based on actual assessments, it is estimated that at any one time 1% of a population is labelled "mentally handicapped" (C.A.M.R., 1980).

The 1981 total population figure for British Columbia is 2,744,467 (Statistics Canada, 1982). Therefore, on the basis of World Health Organization percentage estimates there are between 27,444 and 82,334 mentally handicapped persons presently living in British Columbia. This population estimate range is supported by enrolment statistics for the kindergarten-to-twelve public education system. Ministry of Education records

3. Grossman, H., Manual on Terminology and Classification in Mental Retardation, American Association on Mental Deficiency, 1977, p. 14.

(1982) indicate that there are 13,178 students or 2.53 percent of the total public school population included in the following categories: mildly, moderately, and severely mentally handicapped, learning handicapped, residential and rehabilitation.

The British Columbia Association for the Mentally Handicapped presently estimates the total population figure of mentally handicapped persons living in British Columbia as being 41,167 or 1.5% of the total population. The B.C.A.M.R. has used a higher actual population estimate (1.5%) in order to account for mildly mentally handicapped persons who are often not identified by government agencies and organizations as being mentally handicapped. Table I shows current population estimates and the B. C. Health Surveillance Registry figure for 1981.

TABLE I

MENTALLY HANDICAPPED POPULATION ESTIMATES AND HEALTH REGISTRY TOTAL FOR BRITISH COLUMBIA (1981)

| SOURCE | TOTALS |
|---|---|
| World Health Organization a.) statistical estimate (3%) | 82,334 |
| b.) estimate based on actual head counts (1%) | 27,444 |
| British Columbia Association for the Mentally Handicapped | 41,167 |
| *B.C. Health Surveillance Registry | 12,242 |

*Health Surveillance Registry figures are low compared to other figures because of differences in criteria for categorization and because the registry system used only identifies mentally handicapped persons in the more severe categories. In addition, Health Surveillance Registry figures are based on volunteered, not required information.

The breakdown by age groups of the Health Surveillance Registry data shows that two thirds of the mentally handicapped population identified are over 19 years of age. Using the adults to children ratio identified by the Health Surveillance Registry, it can be estimated that there are 27,140 (.66 x 41,167) mentally handicapped adults presently living in British Columbia.

Within this population of adults (27,140) there exists a wide range of mental disability. To facilitate discussion the terms mildly, moderately, and severely/profoundly mentally handicapped will be used to distinguish low, mid and high range differences in level of adaptive behavior, rate of learning and ability to generalize and transfer learning.

## IV. TOWARD COMPREHENSIVE CAREER EDUCATION

Career education is defined as any education or training which is embarked upon with a view to preparing one's self for a specific emloyment goal. As a group, the career education needs of mentally handicapped adults encompass the following types of educational training:

- academic skills training
- like-skills training
- work-adjustment training
- vocational skills training

The need for any one of these types of education as part of a career education program will vary greatly with each mentally handicapped adult.

Because the main purpose of work adjustment training and vocational skills training is preparing students for employment they always function as career education, whereas academic and life-skill training are often offered in and of themselves, and therefore cannot be considered career education in all instances. For academic and life-skills training to be classed as career education, they must be directed toward meeting a specific job requirement. For example, if it is identified that grade three reading ability and the ability to count change are required for a specific job then the teaching of these skills for that job would be classified as career education. Overall, classification of academic and life-skills training as career education is a disservice to the mentally handicapped population. General academic and general life-

skills training should be considered basic education and, therefore, should be available to all mentally handicapped persons who require these skills to move to a greater level of independence.

When analyzing the relationship of life-skills training to career education, it is important to remember that although it is desirable for mentally handicapped adults to have learned general life-skills before embarking on a career education program, it is not essential. The number and type of life-skills required for competitive employment directly relates to the amount of support provided in the home environment and on the job as well as the type of employment (Bellamy and Horner, 1979).

a) Key Elements

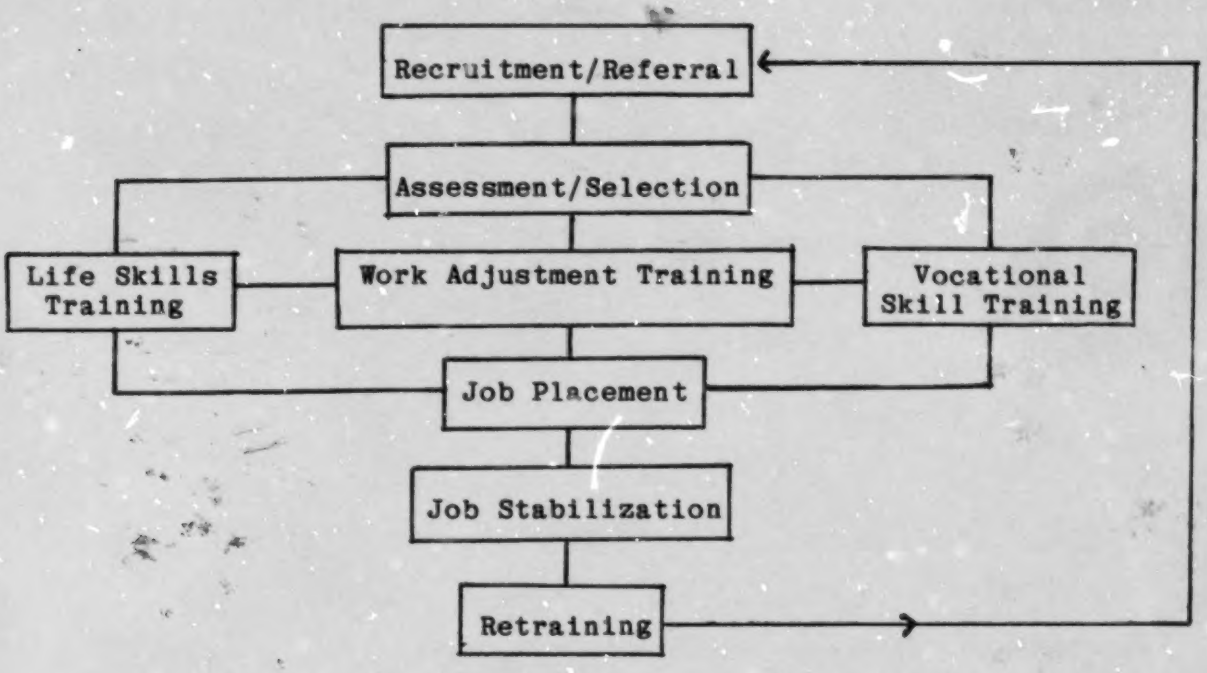
For the purpose of this discussion paper, a comprehensive career education system is one that provides a sufficient range of service programs deployed in a co-ordinated fashion so that a student is able to obtain satisfaction of needs and continuity of service, without having to move from the immediate geographic reagion. It therefore follows that "in a comprehensive system, the pre-conditions exist to provide each potential service consumer with no more and no less than the services he or she needs to maximize their capability."[4]

[4]Neufledt, A.H., Comprehensive Vocational Service Systems for Mentally Retarded People - Definition, Principale and Issues, International Labour Office, Geneva, 1978, p. 49.

Figure I provides a picture of the key components of a comprehensive vocational training system for mentally handicapped adults.

FIGURE 1

THE KEY COMPONENTS OF A COMPREHENSIVE CAREER EDUCATION SYSTEM FOR MENTALLY DISABLED ADULTS.




Analysis of this and other systems have revealed a number of training components common to all comprehensive vocational training systems. The major components will be discussed separately followed by a discussion of the co-ordination of these components through a comprehensive delivery system.

i) Recruitment/Referral

Recruitment/referral reflects the manner in which students come in contact with a career education system. The success of the recruitment/referral process is determined by the extent to which the eduational institution informs potential students and referring agencies about the career education system. This informing of potential students and referring agencies should be an on-going process which is facilitated by use of uniform and descriptive naming, clearly written program brochures, verbal communication and student training outcomes.

Study of a variety of program recruitment/referral systems indicated that it is advantageous to have a fixed point of referral responsible for informing prospective students and referring agencies about the career education system and putting in motion a counselling, assessment and admissions process for prospective users of the system. In institutions offering only one type of training the fixed point of referral may be the program instructor while in institutions offering more than one service, a co-ordinator of adult special education, or equivalent, may become the fixed point of referral. It is important that for any given career education system, people in the community know where and how to make contact.

ii) Selection

Selection of an appropriate career education program for a potential student should be based on information gathered from other agencies and institutions, from intake interviews and vocational evaluation procedures. According to Brolin (1977) vocational evaluation should consist of clinical assessment (medical, social, educational and psychological), work evaluation, work adjustment and on-the-job tryout. Clinical assessment data should accompany the individual being referred or requesting career education services. If this is not the case, it would put into question the appropriateness of the request for service.

When adequate clinical data is not presented at the time of referral, data must be obtained by request from other agencies or by testing. All attempts to gather information should be exhausted prior to making a decision to become involved in testing. Educational assessment (assessment of life-skills and academic skills related to the proposed career education program) can and should be undertaken by qualified educators. Other forms of assessment are the responsibility of other agencies.

Work evaluation is based primarily on the use of standardized tests of vocational interest and aptitude and standarized tests of performance on work samples. Work sample evaluation systems provide an opportunity for individuals to be assessed in a number of hands-on job related or actual job activities which involve primary skills required in many jobs.

Currently available are three work sample systems: (1) the JEVS, VIEWS, and VITAS developed by the Vocational Research Institute in Pennsylvania; (2) selected work samples from the Singer Vocational Evaluation System, Singer Educational Division, New York; and (3) the VALPAR Component Work Series from the Valpar Corporation, Arizona. Although the capital costs of standardized work sample systems are extensive, they are a very valuable and necessary part of a vocational evaluation system.

Work adjustment is a useful tool for evaluting the less motivated and inexperienced student. Individualized work adjustment programs provide an opportunity to monitor acquisition of appropriate behaviours, physical abilities and use of existing inter-personal skills in a variety of vocational situations. Work adjustment encompasses career awareness and pre-vocational skill training. A number of work adjustment programs such as Career Awareness (Vancouver Community College), Occupational Orientation (East Kootenay Community College), and Alternative Career Training (Capilano College) are currently being offered in British Columbia.

On-the-job tryouts may provide the most realistic assessment of a student's vocational capability, provided careful job analysis has determined that the on-the-job tryout selected matches to the known abilities of the student. Neff (1970) has suggested tht the work place may prove to be the most appropriate site of vocational evaluation (i.e. enclave assessment).

Vocational evaluation must be a balance of static assessment (measurement of existing skills and abilities) and on-going assessment (measurement of adaption to work environment). Over-emphasis on static assessment can be very expensive and can lead to denial of service to those who could potentially benefit. Over-reliance on on-going assessment can lead to students being placed into inappropriate training programs and may thus result in a high cost/effectiveness ratio.

At any given time of evaluation not all mentally handicapped adults possess the desire to work and/or personal abilities necessary for success in competitive employment. This statement does not preclude the possibility that these attitudes and abilities may be present at a future date.

An ERIC report entitled Post-secondary Vocational Education for Mentally Retarded Adults (Moss, 1980), which reviews the results of a six year experimental vocational training project has found that "the most important qualities which relate to job successes or failures are: speed of performance, general attitudes relating to the employer, co-workers and the work situation, and the ability to follow instructions." Other studies have shown poor personal hygiene (Kolstoe, 1961; Daniels, 1974), lack of family support (Brolin, 1969; Moss, 1980), tardiness and absenteeism (Daniels, 1974) and poor interpersonal relationships with fellow staff and supervisors (Cohen, 1960) as other important indicators.

Because of the proven unreliability of I.Q. scores as indicators of intelligence and future success, instructors of the mentally handicapped have avoided using I.Q. scores as the criteria for entry into education programs. Unfortunately, in making vocational education available to persons of all intellectual abilities, educators have often overlooked the lack of other skills and attitudes that research has shown to affect success in competitive employment.

Entry into vocational training for competitive employment must be based on assessment of all factors that have been shown to be determinants of success on the job. These factors should be weighted according to the degree to which they determine success. The weighting should reflect the requirements of the specific job for which training is being provided and therefore will vary with each individual situation in which they are being applied. Use of such a weighting system may show that a severely mentally handicapped adult with good personal care and a supportive family is a more likely candidate for vocational education for competitive employment than a mildly mentally handicapped adult who has difficulty getting along with peers and has poor personal hygiene.

On the bais of six years of experimentation in training mentally handicapped adults for competitive employment Moss (1980), has recommended:

> "The post-secondary facilities should be selective and choose for admission individuals with reasonable chances to succeed in vocational training programs. There is a tendency in some states to provide 'prevocational' training to groups of retarded individuals rather than to select individuals for specific job training opportunities."[5]

In recognizing the need for selectivity based on known determiners of success, it should be remembered that all mentally handicapped adults should have an opportunity to access training which would allow them to develop the skills and attitudes required to be successful in competitive employment or sheltered employment in an integrated setting. This range of training options is currently available to the non-mentally handicapped and must also be made available to the mentally handicapped.

iii.) Life-Skills Training

In instances where mentally handicapped adults require life-skills training to function in a specific job situation, life-skills training becomes a component of a comprehensive career education system and therefore warrants discussion in this paper.

[5] Moss, J., Post-Secondary Vocational Education for Mentally Retarded Adults, Council for Exceptional Children, ERIC Clearinghouse, Virginia, 1980, p. 37.

The Alternative Route DACUM chart (1978) has provided a clear identification of the life-skills required by mentally handicapped adults for independent living. Confusion as to the nature of life-skills has arisen from inappropriate use of the term to describe a work adjustment program or a very limited program that teaches only one or two life-skills. Conversely, life-skills programs are often given names which incorrectly suggest that the primary function of these programs is career awareness or vocational training.

For the mentally handicapped, life-skills training must be considered basic education. It is expected that, in future, increased emphasis will be placed on life-skills training in the kindergarten-to-grade 12 public school system, thereby reducing the amount of training required at the adult education level. However, life-skills training must also be available through the adult public education system for (a) those adults who did not receive this training in the public school system, as well as (b) those adults who were unable to achieve competency in required life-skills during their public school years.

Provincially standardized, competency-based, assessment procedures articulated with each of the specific competencies identified in the Alternative Route DACUM Chart, must be developed in order to ensure that mentally handicapped adults are not being taught life-skills that they have already mastered, while not receiving training in the skills they need to learn. In addition, the specific competencies should be

functionally ordered to reflect the degree to which each competency is required for independent living. The competencies should be grouped in a functional heirarchy (e.g. Life-skills I, II & III) which would show a progression from very basic universally required skills for independent living, to more complex skills which often also serve as job-support skills, to more optional stills that improve both quality of life and one's ability to maintain employment, but that are not essential for independent living. The units included in the three training levels would constitute a provincial core life-skills curriculum from which colleges, institutes and school districts could select to meet identified life-skill training needs. A uniform naming system, such as the suggested Life-skills I, II, & III should be used throughout the province. This would greatly increase understanding and acceptance of life-skill training within the community at large and within the adult public education administrative structures responsible for offering life-skills training.

Entry of mentally handicapped adults into life-skills and academic upgrading programs should parallel, as closely as possible, the system ordinarily used for entry of non-handicapped adults into ABE. Competency-based assessment should be used to determine appropriate placement in a program and to provide information for development of realistic educational goals. Both entry and exit requirements should exist for students embarking on a life-skills training programs. When the demand for training exceeds the number of

seats available, a waiting list should be used to determine access to programing.

iv) Work-adjustment Training

Some mentally handicapped adults need to develop work related behaviours and an awareness of the requirements of work in order to successfully obtain and maintain competitive employment or sheltered employment in an integrated setting. Work adjustment education encompasses both pre-vocational skill training and career awareness training. Pre-vocational skill training develops work-support behaviours such as: work tolerance and attention to task (Larsen and Edwards, 1980), personal hygiene, promptness, responsiveness to instruction and lack of distractibility (Mithaugh, 1981). These skills are often developed through a structured, supervised work experience or in a simulated work environment. Although some pre-vocational skills (e.g. promptness) may be related to some life-skills (e.g. telling time) there is a very distinct functional difference. For example, one can be prompt without being able to tell time (relative or friend says when to leave, or watch is programmed to beep when time to leave); conversely, one can tell time yet be consistently late. Career awareness training is designed to increase understanding of

the requirements of work and to prepare students for making occupational choices. This type of training typically relies on field trips, classroom discussions and loosely structured work explorations.

v) Vocational Skills Training

Vocational skills training teaches skills which can be used to produce something of worth to an employer (i.e. marketable skills). Table II indicates three ways in which vocational skills can be taught and some of the factors inherent in each method.

Integration of mentally handicapped adults into regular vocational training is the one method of providing vocational skill training that presently is least utilized in meeting the vocational training needs of the mentally handicapped. It appears that the lack of utilization of this method results mainly from previous assumptions regarding the place of mentally handicapped adults in our society and consequently the public education system and the difficulty of developing a system that can serve both handicapped and non-handicapped adults.

Integration of mentally handicapped adults into regular vocational skill training would give mentally handicapped adults a wide range of training options and provide access to instructional expertise and technical training equipment that currently exists in the adult public education system.

The experience gained from mainstreaming mentally handicapped adolescents into the junior and senior secondary

TABLE II

FACTORS INHERENT IN VOCATIONAL TRAINING MODELS

| CAMPUS-BASED TRAINING (Simulated work environment) | ON-THE-JOB TRAINING | INTERGRATION INTO REGULAR CAMPUS-BASED VOCATION TRAINING |
|---|---|---|
| -Students must be able to transfer to real work setting. Therefore this type of training is most suited to the mildly mentally handicapped. | -Eliminates need for transfer of training. This type of training therefore, is very suited to the needs of the severely mentally handicapped also is effective with other disability levels. | -Mildly mentally handicapped adults are most easily accommodated in this type of training, however, mentally handicapped adults of most functioning levels can be accommodated provided adequate learning assistance services are available. |
| -Capital costs for training hardware can be quite high. | -Minimal capital outlay. | -Start up costs for this type of training are low, however, if integrated training is used on a large scale, the cost of support services for the student and the instructor providing training could be quite high. |
| -Because of the controlled environment, high quality skill training can be provided. | -Quality of training is difficult to maintain because of instructor time management problems and because of the difficulties inherent in trying to provide instruction in place of business. | -Quality of instruction is negatively effected by the fact that most instructors providing training have had little or no background in teaching the mentally handicapped and a large amount of instruction is designed for non-handicapped students. |
| -Instructor costs are low compared to other types of training. | -All the training provided is job relevant. | -Integration assists in development of normal work behaviors and educates future fellow workers and employees about the ambitions and capabilities of mentally handicapped adults. |
| -This type of training is most approoriate in large urban areas. A large population base is needed to obtain 10 to 12 students who are all suited to the same occupation. Also, a large employer base is needed to find enough jobs requiring the skills being taught. | -Provides unlimited training possibilities. | -Provides training options for students who feel their needs aren't met in segregated training programs. |
| | -Student is not taught any generic job skills that would allow him/her to change jobs if the need arises. | -Makes available a wide variety of training programs. |







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systems has indicated that this approach is feasible if supported by appropriate learning assistance and instructor preparation.

Implementation of the TRAC (Training Access) system in colleges and vocational training institutes throughout British Columbia should facilitate the integration of mentally handicapped adults into regular vocational skill instruction. In this system the material to be learned has been delineated into numerous competency areas. This delineation of skill competencies should increase opportunities for mentally handicapped adults to select and obtain instruction in practical skills without being required to complete an entire vocational training program. The TRAC system, however, is based on self-directed learning and places a great deal of emphasis on the ability to read. To take advantage of skill training through the TRAC system, mentally handicapped adults would require learning assistance to translate written instructions into verbal instructions.

vi) Job Placement

In the programs reviewed, responsibility for job placement ultimately rested with the institution or agency providing training, although it was often shared with a variety of government and community agencies.

There are two types of job placement which are used in the training of mentally handicapped adults:

Soft job placement: This term refers to placement of a student in a job for a defined length of time (usually short-term, 2-6 months) and a wage subsidy is provided to the employer (see Tables V-VII for discussion of wage subsidies). These placements are considered training placements. Although employers are often expected to provide on-going employment, they are not legally obliged to do so. Recent changes in both Canada Employment and Ministry of Labour wage subsidy programs have made these programs more suitable to the needs of the mentally handicapped.

Hard job placement: This term refers to competitive job placements in which the employer is responsible for the full wage and where there is a prospect of on-going employment.

The literature pertaining to vocational training of mentally handicapped adults consistently confirms the need for job placment. Job placement as a part of comprehensive career education is supported by Bellamy and Horner (1979), Bluhm (1977), Mithaug and Haring (1977), Moss (1979), Neufeldt (1978) and Sowers et al (1980).

Wolfensberger (1977) feels that mentally handicapped adults should be given the opportunity to find their own jobs:

> "Too often a person who is 'given' a job, places small value on it, since it came to him with little or no effort. By securing his own job and negotiating directly with the employer, he will, in the process, diminish the employer's suspicion and skepticism of his readiness for work." [6]

[6] Wolfensberger, W., The Principle of Normalization in Human Services, National Institute on Mental Retardation, 1972, p. 162.

Although Wolfensberger would like to see mentally handicapped adults find their own jobs he does admit that "there is a small number of applicants who may be ready for work, but who, for any number of reasons, cannot find their own jobs" and feels they "should be given whatever help is necessary to effect their placement".[7] Bellamy (1979) feels there is a need to reverse the current training efforts of schools so that there is less involvement with career awareness and pre-vocational strategies and more involvement in job training and placement. Moody and Williams (1971) view placement and follow-through as the "grand finale" of the rehabilitation process, while Sower et al (1980) state: "The primary goal of a competitive employment training program is client placement".[8] Sowers et al (1980) also state: "The number of staff persons who will assume job development activities, will be contingent on the number of persons that the program intends to place monthly"[9]

[7] Wolfensberger, W., The Principle of Normalization in Human Services, National Institute on Mental Retardaton, 1972, p. 162.

[8] Sowers, J., Lundervold, P., Swanson, M., Budd, C., Competetive Employment Training for Mentally Retarded: A Systematic Approach, Centre on Human Development, University of Oregon, p. 41.

[9] Ibid. p. 42.

Sharing of the responsibility for placement is alluded to by Bellamy and Wilcox (1979). In discussing the need for support services at the secondary level, Bellamy and Wilcox state: "Not only is direct assistance needed in skill training, but also the support of specialists in vocational preparation, job placement and residential living is often critical to successful instruction".[10]

Job placement is the most critical function of a comprehensive vocational training program. It is placement in on-going employment that gives value to the effort and monies expended on vocational training. For mentally handicapped adults, job placement is an essential and mutually exclusive component of the career education process. Consequently, job placement of students involved in a vocational training program is ultimately the responsibility of the institution offering the training. Educational institutions should not embark on vocational training without first identifying the type of jobs for which students are being trained and th availability of those jobs in the community, both for training and for final placement.

In other vocational training programs (apprenticeship training) where on-the-job training is an integral component, the responsibility for locating a job has, in the past, been placed almost totally on the student. The current shortage of

[10]Bellamy T., Wilcox B., "Secondary Education for Severely Handicapped Students: Guidelines for Quality Services", in B. Wilcox and A. Thompson (Eds.) Critical Issues in the Education of Autistic Children and Youth, in press.

tradesmen indicates that this system has weaknesses for even the non-handicapped student. It is now being recognized that there is a need for a job procurement system which is tied directly to the training program.

Actual location of jobs can and should be shared with the students in the program, government ministries/agencies referring students for training and the Canada Employment and Immigration Commission. Recent changes within the Provincial Ministry of Labour and the Canada Employment and Immigration Commission reflect a greater awareness of the employment needs of mentally handicapped adults. Special Needs Counsellors within the Canada Employment Commission have the responsibilty of assisting mentally handicapped adults to find employment. These counsellors perform this function at a level determined by the number of counsellors available for a given population. These counsellors are responsible for serving all handicapped persons looking for work and therefore cannot attend solely to the placement needs of mentally handicapped adults involved in a specific vocational training program. A similar system exists for non-handicapped adults. Generic job placement services (those developed to service the general public) are available upon graduation from a vocational training program, but the Canada Employment and Immigration Commission does not provide specialized services tied to specific vocational training programs. Mentally handicapped adults and their advocates should be encouraged to use

generic placement services but it must be remembered that a weakness inherent in generic services is that they are not designed to focus on the unique needs of a specialty group.

Every effort should be made to share the task of finding suitable jobs for mentally handicapped adults involved in a vocational training program. In instances where jobs cannot be found by the individual or by a government agency, educational institutions must have the capacity to assist with location of suitable job placements. Funding of career education programs for mentally handicapped adults and the service measures applied to those programs must allow sufficient flexibility and time allotment for provision of some job placement service.

vii) Job Stabilization

Job stabilization refers to the time and services required to assist a mentally handicapped adult to function independently in a job at a performance level required by the employer. Initially, intense on-site instructicn is required to facilitate transfer of learned skills to the job site. Sower et al (1980) in their Competitive Employment

Training Model clearly show the instructional steps required in job stabilization. Sower et al (1980) include the following steps in their program: job analysis, matching client and job, determination of other critical job information, preparing parents/advocates and students, preparing co-workers, training on job site, evaluation of job performance, and fading from job site.

The critical need for job stabilization is emphasized by Bellamy and Horner (1979) who suggest that though the "train, place and forget model may be sufficient for some mildly handicapped individuals, it is clearly inappropriate for severly handicapped individuals."[11]

As the student learns to apply skills on the job site, there is a gradual shift from requiring instructional support to requiring emotional support. During this time there should be a corresponding shift of responsibility from the education service provider to the agency/organization making the referral, and the individual.

[11] Bellamy G., Horner R., Structured Employment; Productivity and Productive Capacity, University of Oregon, University Press, 1979, p.6.

viii.) Retraining

A comprehensive career education system must provide opportunities for individuals to get retraining if they must change their job or if they want to advance into another job. The opportunity must exist for mentally handicapped adults to re-enter a career education system if new vocational education needs develop. It is also important that employers of mentally handicapped adults are given assurance of the possibility of retraining for their workers if the worker's production level falls or if they need to move the worker into another job.

b. Delivery of Models

i) Current Provisions

Until five years ago, there was little in the way of public education opportunities for adults with a mental handicap. In recent years, there has been a marked growth in services, programs, and resources, but, in relation to the measured and expressed need, the public education system has only begun to scratch the surface. While the Ministry has provided some leadership, it has not made a clear, long-term commitment. Among the steps taken by the Ministry in support of adult special education several have contributed to the establishment of the foundation upon which future developments can take place.

In 1979, upon the impetus of the Vancouver-Richmond Association for the Mentally Retarded and Vancouver Community College, the Ministry of Education began to develop the Alternative Route curriculum materials. At present this resource includes an Instructor's Manual and over eighty curriculum manuals. While it remains just one resource, it has contributed greatly to the capability of colleges, school boards and other agencies to offer life-skill programs for mentally handicapped adults. In 1980 the Ministry began to provide some co-ordination of adult special education for the first time as it obtained the services of an Adult Special Education Consultant, seconded from one of the colleges within the B.C. public education system. Since that time, the Ministry has continued to make use of the Continuing Education Project system to enable colleges and school boards to develop innovative approaches to the education of mentally handicapped adults.

In 1981, the Ministry provided funds for its first adult special education initiative enabling most colleges to establish adult special education co-ordinator positions and more career education programs for the handicapped. The impact of Adult Special Education co-ordinators within the college system has increased access of mentally handicapped adults to regular and special adult education programs and services. Also, in the past three years most colleges have conducted regional needs assessments which have clearly identified the special education needs within their regions.

Recently a critical step in establishing the foundation for adult special education was undertaken by the Ministry of Education through the issuance of A Ministerial Policy Statement on the Provision of Adult Special Education in the Public Education System of British Columbia. This statement, released by Mr. Jim Carter, Deputy Minister, in March 1982, has profound implications for mentally handicapped adults. The statement, "recognizes adult special education as an integral part of the total education enterprise",[12] and recognizes the responsibility of the Ministry to develop special education guidelines and to co-ordinate programs on a province-wide basis. Presently the process for developing guidelines has been initiated and recommendations from the field are being solicited; however, steps have not yet been taken to address the Ministerial co-ordination responsibility on a permanent basis. A survey of the opinions of adult special education educators and other persons working with mentally handicapped adults indicated that the need for co-ordination is extremely apparent at this stage of development.

In sum, the Ministry and many of the public education institutions have taken the initial steps towards establishing a foundation and presence in the adult special education field. Much has been done, but clearly much more needs to be done.

[12] A Ministerial Policy on the Provision of Adult Special Education Programs in the Public Education System of British Columbia, Ministry of Education, March 1982, p.1.

A recent survey to obtain information for this discussion paper has shown a rising level of involvement of colleges, institutes and school districts in providing various types of educational programs and services to mentally handicapped adults. Figure II shows the range of program offerings for the mentally handicapped that currently exists in the Province of British Columbia. The range of programs in British Columbia can be compared with the range of programs in Alberta (Figure III), where there also has been recent increase in the provision of education progams for mentally handicapped adults.

Figure II shows there is much variation in the types of programs being offered within British Columbia. Some colleges, school districts, and institutions are offering specific training while many colleges are including three or four different types of training in one program. Totals at the bottom of Figure II indicate that there is a greater prevalence of academic upgrading, life-skills training and work adjustment training than vocational skills training. This difference in the prevalence of education options reflects an emphasis to date on development of independent living skills and job support skills rather than marketable job skills. The provincial development pattern existing to date is that life-skills programs have developed first, followed by development of work adjustment and some vocational skill training.

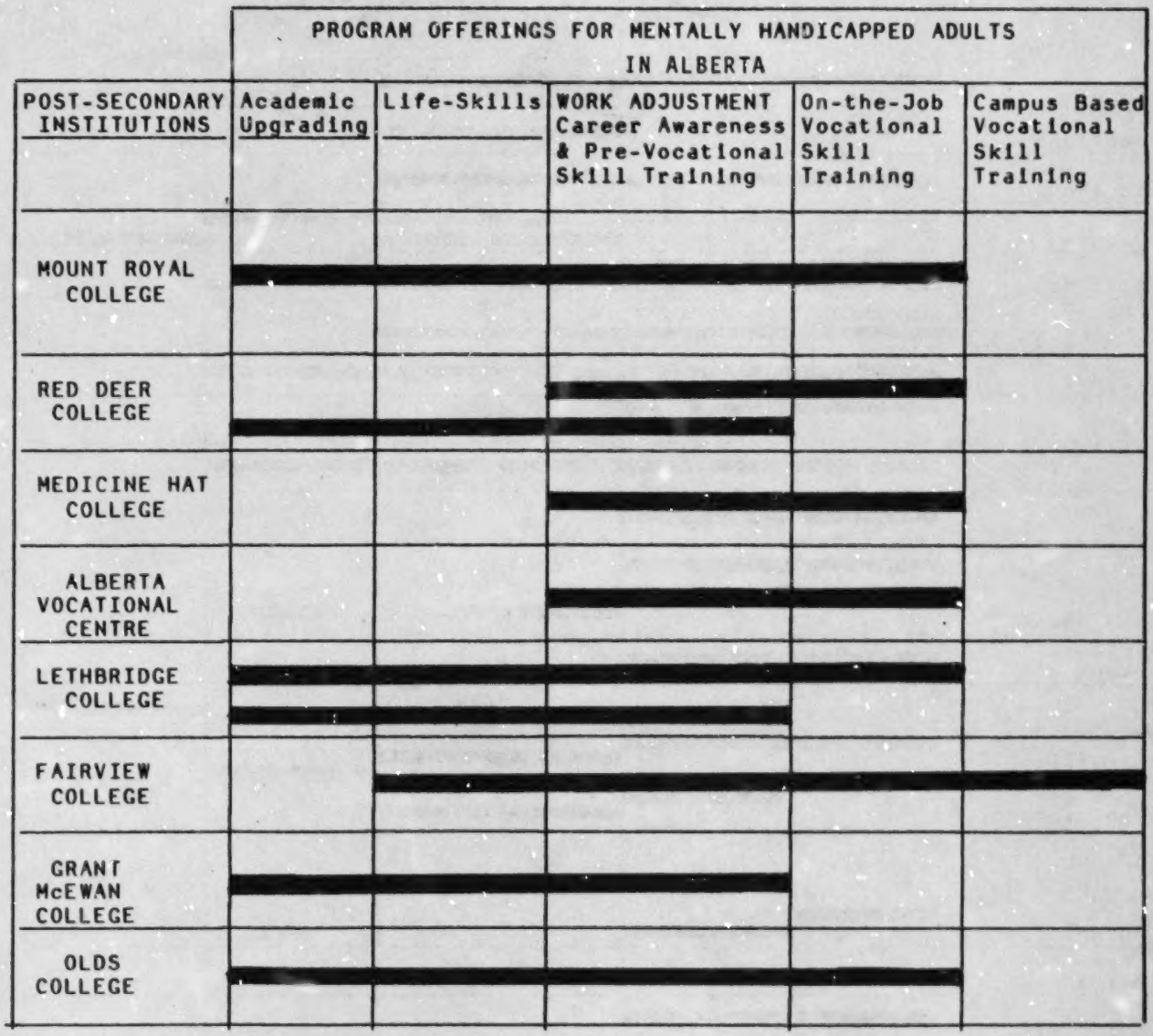
FIGURE II

- 33a -

PROGRAM OFFERINGS FOR MENTALLY HANDICAPPED ADULTS IN B.C.

| POST-SECONDARY INSTITUTIONS | Academic Upgrading | Life-Skills | Work Adjustment Career Awareness & Pre-Vocational Skill Training | On-the-Job Vocational Skill Training | Campus Based Vocational Skill Training |
|---|---|---|---|---|---|
| Camosun | ■ | ■ | ■ | | |
| Capilano | | | ■ | | |
| Caribou | ■ | ■ | ■ | | |
| Douglas | (varies according to contract) | | ■ | ■ | ■ |
| East Kootenay | ■ | ■ | | | |
| Fraser Valley | ■ | ■ | ■ | ■ | |
| Kwantlen | ■ | ■ | ■ | ■ | |
| Malaspina | ■ | ■ | ■ | | |
| New Caledonia | ■ | ■ | ■ | ■ | |
| North. Lights | ■ | ■ | | | |
| North Island | ■ | ■ | | | |
| Northwest | | | ■ | ■ | |
| Okanagan | ■ | ■ | | | |
| Pac. Voc. In. | ■ | ■ | | | ■ |
| Selkirk | | | ■ | ■ | |
| Van. Com. Col. | | ■ | ■ | | |
| SCHOOL DISTRICTS | | | | | |
| Burnaby | ■ | ■ | | | |
| Delta | ■ | ■ | | | |
| North Van. | ■ | ■ | | | |
| TOTALS Prog. Models | 17 | 18 | 13 | 6 | 2 |

FIGURE III


PROGRAM OFFERINGS FOR MENTALLY HANDICAPPED ADULTS IN ALBERTA
POST-SECONDARY INSTITUTIONS
Academic Upgrading
Life-Skills
WORK ADJUSTMENT Career Awareness & Pre-Vocational Skill Training
On-the-Job Vocational Skill Training
Campus Based Vocational Skill Training
MOUNT ROYAL COLLEGE
RED DEER COLLEGE
MEDICINE HAT COLLEGE
ALBERTA VOCATIONAL CENTRE
LETHBRIDGE COLLEGE
FAIRVIEW COLLEGE
GRANT McEWAN COLLEGE
OLDS COLLEGE

Recently this pattern has changed with institutions such as Pacific Vocational Institute and Northwest College developing vocational training programs independent of life-skills programs.

A breakdown of the work adjustment and vocational training models currently being used in British Columbia is shown in Table III. Table III shows that the programming being offered is primarily directed towards the mildly and moderately mentally handicapped. It can also be seen from Table III that the level of success in job placement, in most cases, is greater in programs that provide vocational skill training. This difference in success of job placement supports the view that work adjustment training (career awareness and pre-vocational skills) does not in itself prepare mentally handicapped adults for competitive employment.

Comparison of work adjustment and vocational training programs being offered in British Columbia to those being offered in Alberta and the State of Washington indicated that the student to staff ratio is generally greater in the British Columbia programs and the support services (e.g. job placement and stabilization) provided are considerably less. For example, a program offered at Olds College, Alberta, has a staff of one co-ordinator, one community liaison person and two instructors for a range of between 12 to 16 on-campus students and a similar number of students

TABLE III

PRE-VOCATIONAL AND VOCATIONAL TRAINING MODELS IN B.C.

| MODELS | FREQUENCY OF USE | MENTAL ABILITY/DISABILITY LEVEL | PERCENT EMPLOYED 1981/82 |
|---|---|---|---|
| MODEL No. I Career awareness and pre-vocational training. | 5 | Mildly handicapped.....<br>Mildly & Moderately handicapped..<br>Mildy handicapped.....<br>(high functioning)<br>Mildy & Moderately handicapped...<br>Mildy & Moderately handicapped... | 11%<br>new program<br>17%<br>14%<br>31% |
| MODEL No. II Career awareness pre-vocational training and on-the-job training. | 4 | Mildy & Moderately handicapped...<br>Mildy handicapped<br>Mildy & Moderately handicapped...<br>Mildy & Moderately handicapped... | 27%<br>7%<br>new pro-<br>grams |
| MODEL NO. III On-the-job skill training | 1 | Mildy & Moderately handicapped... | 57% |
| MODEL NO. IV Campus based vocational skill training. | 2 | Mentally handicapped adults who are job ready but require specific vocational skill training...<br>Mildy & Moderately handicapped... | 62.5%<br>new program |
| POLARIS provides all the services of this model but have outside agency do training. | 1 | Mentally handicapped adults who are job ready but require specific skill..... | 69% |

N.B. The percent employed figures are based on only one year's results and should not be taken as a reliable indication of the success of the program.

in on-the-job follow-up. Lethbridge College, Alberta has one co-ordinator/instructor, one full-time vocational co-ordinator for a program that serves 12 students in on-campus instruction and approximately 24 students in job stabilization and follow-up. Follow-up in this program is provided for one year. The Competitive Employment Training program offered by the Specialized Training Centre, University of Oregon, has a one to five instructor to student ratio for on-campus instruction and on-the-job skill training and a one to thirty ratio for job follow-up, which is provided for approximately one year. This program has a total staff complement of one co-ordinator, two instructors and two job placement and training specialists. It has been determined that for this program, it costs approximately $6,000 per student to provide career education (training, placement and stabilization) for a period of 18 months.

ii) Suggested Delivery Model

In the five years that Colleges and School Districts have been offering post-secondary education for mentally handicapped adults, there has gradually emerged a delivery system that with some refinements could provide the framework for co-ordinated delivery of adult career education for mentally handicapped adults. Figure IV presents a delivery system for a college while Figures V and VI

FIGURE IV

COMPREHENSIVE DELIVERY SYSTEM - COMMUNITY COLLEGE

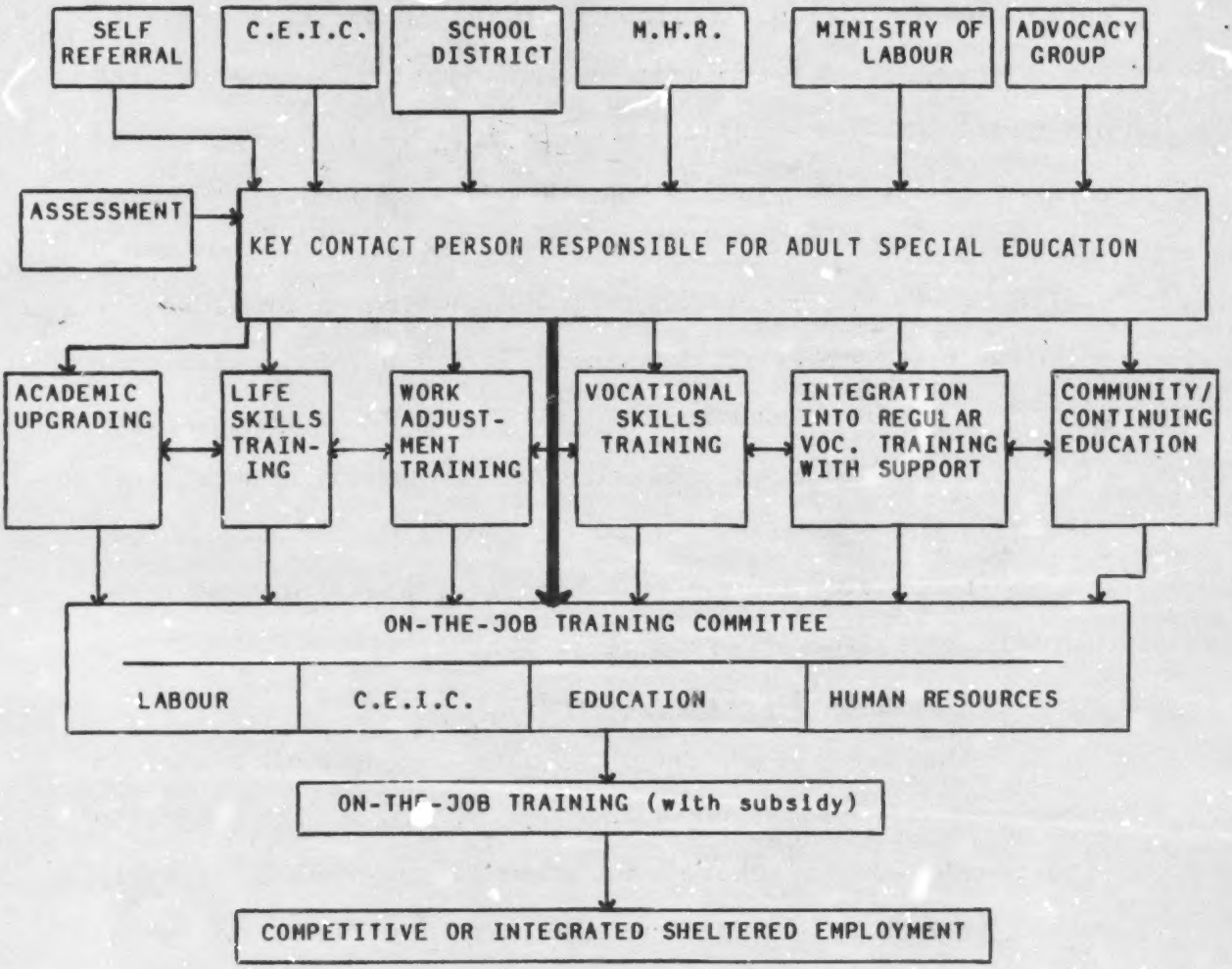


FIGURE V

COMPREHENSIVE DELIVERY SYSTEM - SCHOOL DISTRICT

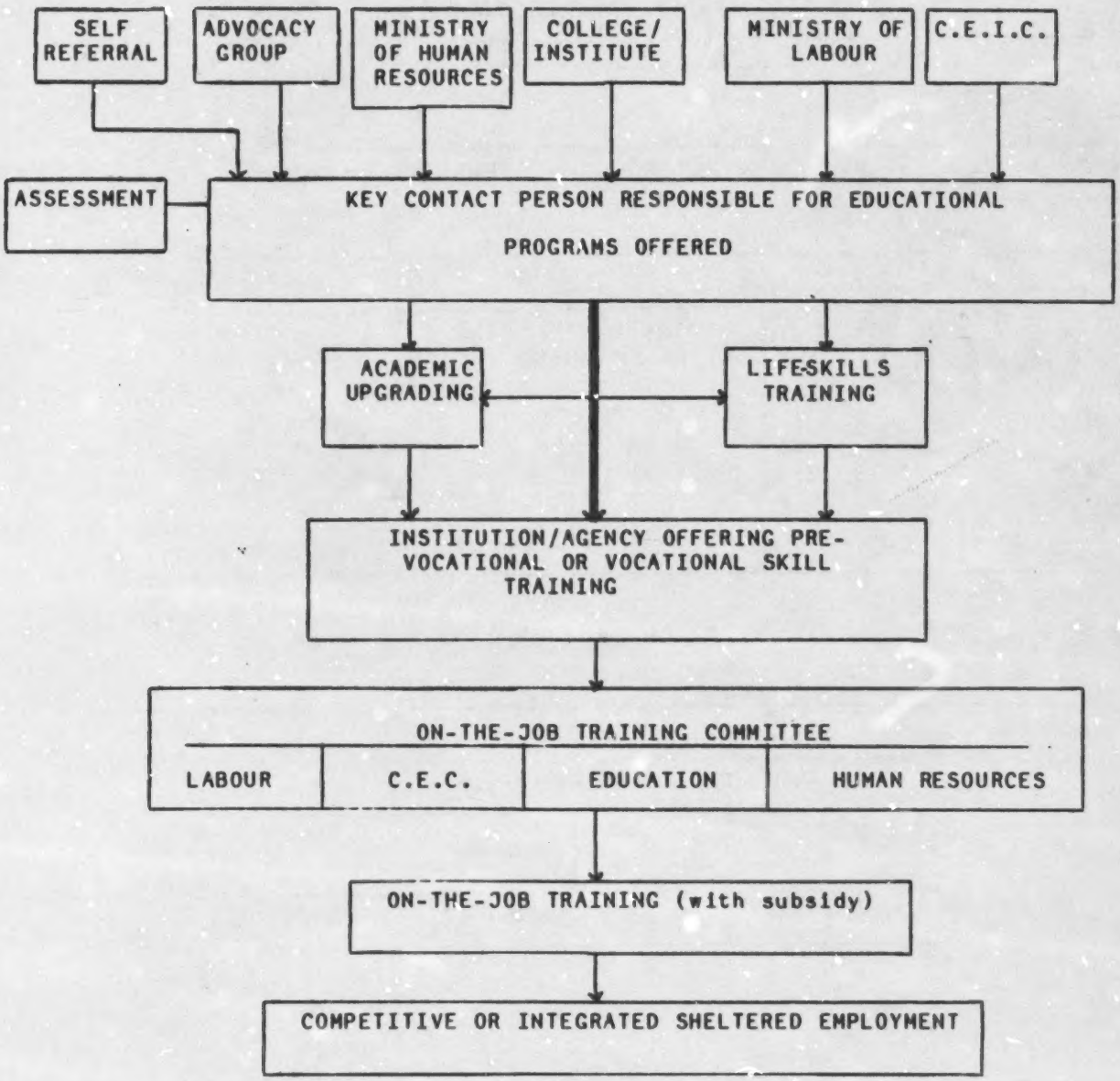
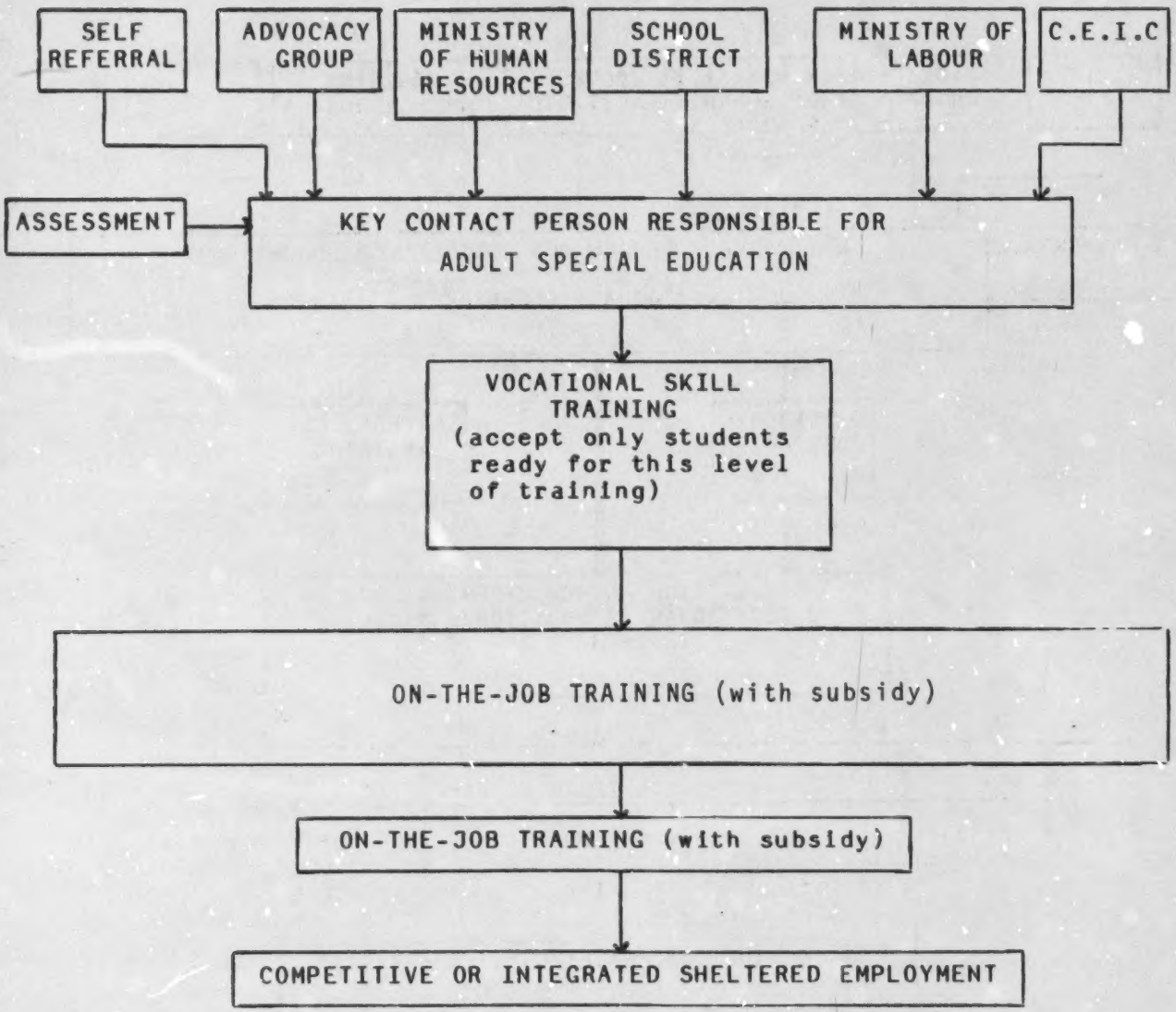


FIGURE VI

COMPREHENSIVE DELIVERY SYSTEM - PROVINCIAL INSTITUTES


SELF REFERRAL
ADVOCACY GROUP
MINISTRY OF HUMAN RESOURCES
SCHOOL DISTRICT
MINISTRY OF LABOUR
C.E.I.C
ASSESSMENT
KEY CONTACT PERSON RESPONSIBLE FOR ADULT SPECIAL EDUCATION
VOCATIONAL SKILL TRAINING (accept only students ready for this level of training)
ON-THE-JOB TRAINING (with subsidy)
ON-THE-JOB TRAINING (with subsidy)
COMPETITIVE OR INTEGRATED SHELTERED EMPLOYMENT

present variations on this system for a school district and a provincial institute.

The comprehensive delivery system shown in these figures is composed of three major stages. The first is referral and program selection. In this model it is assumed that most mentally handicapped adults being referred for educational service will be referred by an agency or government ministry. Self referrals would tend to be made by those mentally handicapped adults who are functionally independent. When a referral/request for service is made it is expected that some overall plan has already been developed and a need for career education has been identified as a part of that plan. This concept of an overall plan has been given a variety of names and meanings by different ministries and agencies (e.g. Marketing Plan - C.E.I.C.*, Individual Opportunity Plan - M.H.R., Comprehensive Services Plan - Advocacy Groups). The discrepancy between these names and plans is not of utmost importance. What is most important is that some form of planning is done prior to the referral stage. Inherent in planning is assessment. If a general plan is to be developed prior to referral, this implies that the agency/ministry doing the planning is reponsible for assessment to a level that is adequate for development of that plan.

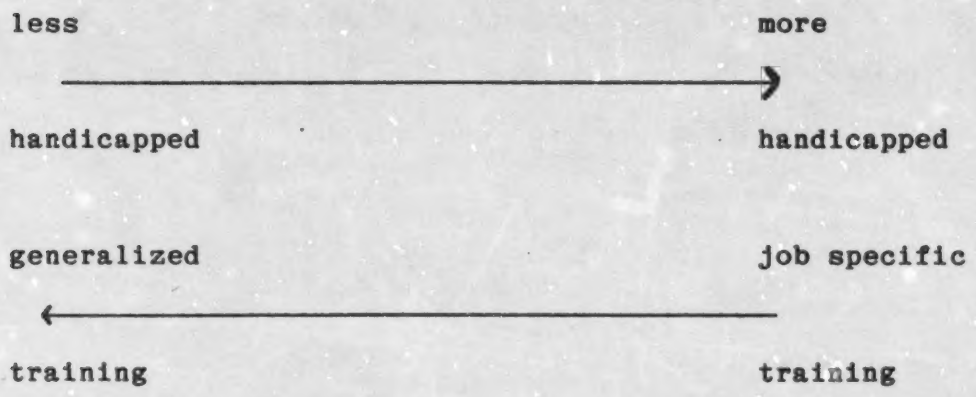
* C.E.I.C. - Canada Employment and Immigration Commission

Once a referral has been made, the key educational contact person, the potential student, his advocate and the referring agency should meet to incorporate an appropriate sequence of education programming into the "overall" plan. Any additional educational assessment and work evaluation that is required at this time would be the responsiblility of the institution providing educational service. At this stage, the key education contact person would look to the range of education services available within the "immediate geographical region" to select the most appropriate sequence of training to meet the goals developed in the overall plan.

The principle that should govern selection of program options is: the more intellectually handicapped the individual, the more specific the training should be. According to the principle shown in Figure VII, it is likely that a severely mentally handicapped student would move directly to on-the-job training while a mildly handicapped individual may enter into work adjustment training, then complete a number of practical skill competency areas in the Common Core of the TRAC program prior to being placed in on-the-job training.

FIGURE VII

PRINCIPLE GOVERNING SELECTION OF PROGRAM OPTIONS



Once the student is ready to move into on-the-job training (with or without subsidy) an On-the-job Training Committee would be brought together to incorporate on-the-job training, job placement and job stabilization into the overall plan. This committee would be made up of some combination of the following: Ministry of Labour, Education, Human Resources and the Canada Employment and Immigration Commission, but would vary for each individual depending on who made the referral and what type of service is required. It would be this committee that would define for each individual case the locus of responsibility for on-the-job training, job placement and job stabilization. This committee would develop a time-lined plan for shifting of responsibility from the educational institution to other ministries, advocacy groups and the individual.

When delivering services to mentally handicapped adults, it is imperative to remember that they are a highly individualized group of people. It would be impossible to design a delivery system that could deal with all mentally handicapped adults in the same manner. The system outlined is designed to accommodate individual differences. With each individual there will be differences in the referring agency, the make-up of the planning group, the career education plan, the make-up of the On-the-job Training Committee and the on-the-job training and support system.

In the definition of a comprehensive vocational training system that was presented earlier in this paper, it was stated that consumers would experience "satisfaction of needs and continuity of service without having to move from the immediate geographic region." Within this definition it is logical to incorporate services from a variety of sources into a co-ordinated delivery system. In the lower mainland an "immediate geographic region" may include a community college, two school districts and a vocational training institute. In determining the size of an "immediate geographic region" the availability of transportation, family support and housing must be considered. To adequately serve mentally handicapped adults in rural areas colleges must maintain a community focus. In the lower mainland, because of the close proximity of colleges, school districts and institutes, and the availability of transportation, it is reasonable that a college would have a regional focus to the extent that a full range of career education programs would not be available at any one college, but rather, within an identified group of colleges, school districts, institutes and agency sponsored training programs.

Prior to developing an education program similar to one being offered elsewhere within the immediate area an adult public education institution should first determine that: a) the need for instruction is greater than that which is being met through existing programs, or b) there is a

need for a different type of training than that presently being offered. An example of this type of co-ordination of services can be found in North Vancouver. In the past, Capilano College and North Vancouver School District were both offering life-skills training, thereby creating a need for delineation of services in this region. As a result, Capilano now only offers work adjustment training while the school district has specialized in providing life-skills training. Past experience, however, has shown that to provide functional career education for mentally handicapped adults, it is critical that job stabilization training is provided in the community that the individual will reside. Attempts in the past to send mentally handicapped adults to Vancouver for vocational training then return them to their own community to find work were not successful in most cases.

## VI. LINKAGE AND OVERLAP

Career education for mentally handicapped adults cannot exist in isolation. Many linkages must be established between the career education process and the services of other ministries and agencies. At the present time, many linkages do exist as well as some overlap in service provision.

Tables IV to VI outline the services of a variety of government ministries which interact with the career education process. Tables VII to XI indicate the existing overlap in services between the ministries. Where does education fit in the midst of all these services? Education, by definition, should provide the following programs and services within the realm of career education for mentally handicapped adults:

i) educational assessment and evaluation

ii) educational planning

iii) educational training or instruction including:

- academic upgrading ) as required for
- life-skill training ) vocational preparation
- work adjustment training
- vocational skills training

iv) job stabilization (including job placement as required)

The suggested delivery system that is described in the previous section facilitates establishment of linkages at the intake/planning stage and at the on-the-job training stage. In addition, there is a need for continuing communication between individuals linked by the career

## TABLE IV

### TRAINING SUBSIDIES AND SERVICES: MINISTRY OF HUMAN RESOURCES

**FINANCIAL ASSISTANCE WORKER**

-financial support
-some assessment & counselling

**REHABILITATION AND SUPPORT SERVICES -REHABILITATION OFFICER**

-assessment
-counselling
-monitoring of school progress in educational programs
-monitoring of work experience and on-the-job training.

As part of Individual Opportunity Plan

**INDIVIDUAL OPPORTUNITY PLAN**

-a program of exploration & training experience with the overall goal being employment.

-Long-term monitoring by Rehabilitation Officer

**Resources available for development of INDIVIDUAL OPPORTUNITY PLAN**

**POST-SECONDARY EDUCATION PROGRAMS**

M.H.R. can provide:

1. Training for a specific goal.
   -will continue to get Income Assistance benefits while getting education.
2. Training for Upgrading
   -tuition, transportation, & books while attending program

**WORK EXPERIENCE**

Without Remuneration

M.H.R. can provide:

1. Community Involvement Plan.
   -placed with non-profit organization
   -not highly employment oriented
   -6 months initially, can be extended indefinitely
   -$50/month for 20 hrs. work
2. Incentive Program
   -more employment oriented
   -$10 more if have dependents
   -6 months initially, can be extended up to a year
3. Work Activity Program
   -four in province
   -provide work experience and life skills

With Remuneration

**ON-THE-JOB TRAINING**

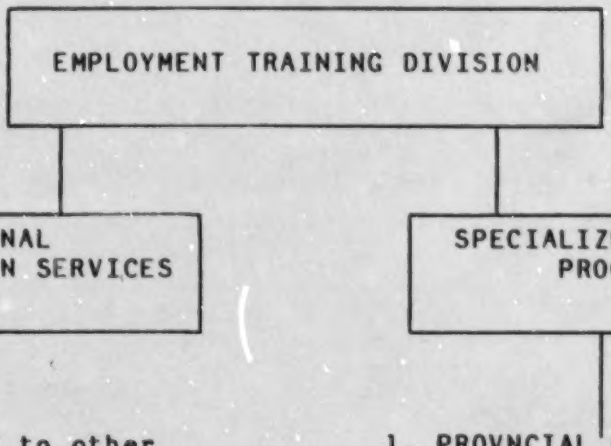
M.H.R. jointly administers the Income Assistance Program with the Ministry of Labour.
- max. of $2.50/hr. subsidy for 6 months
- can be extended if there will be a job offer at end of training

Also can take advantage of other subsidy programs.

1. Ministry of Labour
2. Public Service Com.
   - Provincial and Federal
3. Canada Employment & Immigration Commission

TABLE V

TRAINING SUBSIDIES AND SERVICES: MINISTRY OF LABOUR




1. Assessment - refer to other agencies or professionals.
   - will cover assessment costs.

2. Counselling - develop a vocational training plan.

3. Training - refer to other agencies.
   - can cover cost of books, fees, transportation, educational equipment, prosthetics, and technical aids.
   - can also provide maintenance allowance, dependent on need.

4. Wage Reimbursement - can reimburse to employer 50% of the wages of adult with a disability, for a maximum of one year.
   - no wage ceiling.
   - reimbursement program is available for both full and part-time work.

1. PROVNCIAL EMPLOYMENT AND TRAINING FOR HANDICAPPED PERSONS
   - 2-6 months of funding for employers to hire and train handicapped persons. Can be extended another 6 months if required.

   NON-PROFIT EMPLOYERS

   - 100% wage subsidy with no upper limit on wage.

   PRIVATE SECTOR AND LOCAL GOVERNMENT EMPLOYERS

   - 50% subsidy of total wages. Subsidy can be set up on a reducing scale which starts 100%.
   - no upper limit on wage.
   - can be extended an additional 6 months if position is to become on-going.

2. INCOME ASSISTANCE PROGRAM
   - jointly administered by M.H.R. & Labour.
   - exclusive to M.H.R. clients.
   - maximum of $2.50/hr. subsidy for 6 months.
   - can be extended if job is to become on-going.

TABLE VI

TRAINING SUBSIDIES AND SERVICES: CANADA EMPLOYMENT AND IMMIGRATION COMMISSION

**SERVICES**

**SPECIAL NEEDS COUNSELLOR**

- assessment
- development of employability action plan. This can incorporate a range of rehabilitation services available in the community and through other Ministries.
- monitoring of employability plan.
- encourage employers to use incentive programs to provide on-the-job training.

**ON-THE-JOB TRAINING**

**PROGRAM FOR THE EMPLOYMENT DISADVANTAGED (P.E.D.)**

- provides a wage subsidy of:

  85% of gross wages for up to 13 weeks
  50% of gross wages for up to 26 weeks
  25% of gross wages for up to 26 weeks
  TOTAL - 65 weeks

- Although this program is to provide subsidy for full-time work (32.5 hrs.), exceptions can be made if a person's

**GENERAL INDUSTRIAL TRAINING PROGRAM**

- This program can also be used to subsidize the wages of mentally handicapped employee (85% of gross wages for up to 52 weeks). It is possible to combine this program with the P.E.D. program to allow for an extended training period in situations where there is a need for long-term training.

**INSTITUTIONAL TRAINING**

**THE NATIONAL INSTITUTIONAL TRAINING PROGRAM**

- The Federal government will buy seats in courses leading to employment.
- These courses offer skills training or combine educational upgrading with skills training if this is what is required for a specific group.

**SKILLS GROWTH FUND**

- For the next two fiscal years, approx. $108 million will be available to develop courses, build new facilities, and expand or modernize old ones.
- Capital funding is available for all approved projects up to a maximum of $40,000. Funding is also available, in certain cases, for initial operating and course development costs.
- This fund is available for training of adults who need a specially adapted training approach and/or environment to acquire needed skills.

TABLE VII

RELATED SERVICES: MINISTRY OF HUMAN RESOURCES

(Rehabilitation Services)

| | |
|---|---|
| ASSESSMENT | - in-depth interviews which focus on education, work experience, health, family background, personal factors, and vocational interests.<br>- information gathered from other agencies and previous internal assessments.<br>- develop an Individual Opportunity Plan based on gathered information. |
| TRAINING | - refer to other agencies and institutions.<br>- set up work experience placements.<br>- lifeskill workers provide task specific training required for greater independence.<br>- can refer to Achievement Centres which are partially funded by M. H.R. |
| JOB PLACEMENT | - work with Ministry of Labour to place client using the Income Assistance wage subsidy program. |
| ON-THE-JOB COUNSELLING AND SUPPORT | - rehabilitation officer will provide on-going follow-up as long as required.<br>- Responsibility to maintain communication with the Rehabilitation Officer is also placed on the client. |

TABLE VIII



RELATED SERVICES: MINISTRY OF LABOUR

(Vocational Rehabilitative Services)

| | |
|---|---|
| ASSESSMENT | - initial screening interview.<br>- information gathered from health and education records.<br>- assessment services can be purchased from other agencies and professionals on behalf of client. |
| TRAINING | - refer to other agencies. |
| JOB PLACEMENT | - rely on individual and other agencies to find placements.<br>- involved in screening placements once they have been found. |
| ON-THE-JOB COUNSELLNG AND SUPPORT | - mainly rely on services of other agencies. |

TABLE IX 42f

RELATED SERVICES: MINISTRY OF LABOUR

(Employment Training Division)

| | |
|---|---|
| ASSESSMENT | - |
| TRAINING | - |
| JOB PLACEMENT | - actively seek employers interested in hiring and training handicapped persons.<br>- will facilitate job placement. |
| ON-THE-JOB COUNSELLNG AND SUPPORT | - rely on services of other agencies. |

TABLE X

RELATED SERVICES: CANADA EMPLOYMENT COMMISSION

(Special Needs Counsellors)

| | |
|---|---|
| ASSESSMENT | - in-depth interview<br>- administer General Aptitude and Test Battery and the Canadian Occupational Inventory.<br>- can refer clients to the C.E.I.C. Special Services Program for more in-depth testing.<br>- can refer to other agencies.<br>- this information is used to assist client in developing an Employability Action Plan. |
| TRAINING | - contract to other agencies. |
| JOB PLACEMENT | - will refer client to suitable available jobs.<br>- encourage employers to utilize incentive programs.<br>- will do job placement if required. |
| ON-THE-JOB COUNSELLING AND AND SUPPORT | - will maintain periodic on-the-job site contact with the client as long as required.<br>- Polaris: will spend two weeks on-the-job with client if required. |

N.B. Polaris is an Outreach project of the Canada Employment Commission which provides mentally handicapped adults with the following services:
- screening
- referral to vocational training
- work experience
- assistance with job search
- placement
- follow-up

The project has been very successful (70%); however, only provides service for the lower mainland.

TABLE XI

MINISTRY OF EDUCATION SERVICES (Colleges, Institutes and School Districts

| | |
|---|---|
| ASSESSMENT | - most institutions conduct program related assessment designed to screen students entering a program.<br>- most institutions assess academic and life skills, (the Adaptive Functioning Index is commonly used).<br>- one College (E.K.C.C.) offers an independent assessment service designed to assess academic, lifeskills, and vocational skills of moderately and severely mentally handicapped adults. |
| TRAINING | - a variety of training programs (academic upgrading, lifeskills, career awareness, prevocational skills training) are currently being offered.<br>- most institutions only offer one or two of the above options. |
| JOB PLACEMENT | - some colleges/institutes involved in career awareness and vocational skills training have become involved in job placement. |
| ON-THE-JOB COUNSELLING AND SUPPORT | - some colleges/institutions have become involved in providing this service for students recently placed in a job. |

education process. Most colleges now have an Adult Special Education co-ordinator to maintain the overall communication that is required with other education and rehabilitation service providers, agencies, and ministries. It must also be recognized that instructors of mentally handicapped adults have a need to communicate with other agencies, parents, and ministries that is far greater than that of instructors of non-handicapped students. This need to communicate with outside agencies must be considered when establishing student/teacher ratios and level of teacher/student contact time.

At present, there are ministries other than the Ministry of Education that are providing services within the realm of education. These ministries should look toward ways of co-ordinating their services within the adult public education structure. The Ministry of Human Resources currently funds life-skills programs which provide individualized or group life-skills instruction for example. As a result, some confusion has arisen regarding which ministry (Education or Human Resources) is responsible for life-skills training. The efforts of both Ministries should be co-ordinated to ensure effective service delivery and to avoid duplication of service.

Because of the highly individualized needs often exhibited by mentally handicapped adults requiring life-skills training, this type of training for some mentally handicapped adults cannot be provided without a support system which assists a student in regular education settings and that targets instruction to meet specialized needs. The requirement

of this type of educational support for special needs students is addressed in the kindergarten-to-grade 12 system by the funding of Child Care and Chance Workers Programs of the Ministry of Human Resources. The co-ordiation between the Ministry of Education and the Ministry of Human Resources that exists in relation to these programs should be studied with a view to establishing a similar system of co-ordination for the Life-Skills Workers Program.

An example of the type of co-ordination recommended can be found within Douglas College's Consumer and Job Preparation for Adult with Special Needs program. Douglas College has hired an instuctor who both teaches and co-ordinates this program. In addition, four paraprofessionals who are funded by the Ministry of Human Resources Life-Skills Worker Program have been attached to this program so that the amount of service provided can be increased. By attaching the life-skills workers to a college program, they are able to access all the educational resources of the college and the educational focus of the training is maintained. Also, with this type of arrangement the Ministry of Human Resources and any Social Service agency that is administering the funds continues to have an involvement in the type of service being provided. The results from the Douglas College program have shown that this type of co-ordinated approach to life-skills taining is extremely effective in obtaining measurable gains in independence and in integrating mentally handicapped adults into other college and community programs.

## VII FUNDING

Most colleges and institutes and some school districts now provide some educational services for mentally handicapped adults. If current program offerings are analyzed from the perspective of a comprehensive career education system, it becomes obvious that there are still many gaps in the range of programs available within any given college region. If the range of educational services for mentally handicapped adults is going to reach the level required and the level available for non-handicapped adults, there will have to be an increase in the resources available for the provision of educational opportunities to mentally handicapped adults.

The methods employed by the Ministry of Education for dispersement of funds could have considerable influence on the future development of education for mentally handicapped adults. Integration of mentally handicapped adults into regular vocational training programs could be encouraged, for example, by the Ministry providing funds for learning assistance based on the number of students integrated into a particular program. On this basis, colleges and institutes would have to project, for a given budget year, the number of integrated seats they would anticipate filling during the year. This figure would then translate into a lump sum of money that would be made available for learning assistance for integrated students.

In addition to innovative funding approaches, appropriate service measures for programs will have to be developed. The present measures are a barrier to success for the programs to which they are applied. Traditional service measures do not allow the flexibility that is required to train a mentally handicapped adult for competitive employment or sheltered employment in an integrated work setting. There is a need to direct service measures toward the analysis of outcomes rather than methods of delivery. The key service measure of career education programs for mentally handicapped adults should be the percentage of students successful in obtaining on-going competitive employment or sheltered employment in an integrated environment.

One method of determining a realistic cost/effective figure for career education programs for mentally handicapped adults would be to waive application of traditional service measures for a defined period of time (i.e. 3 to 5 year developmental period). In this time, programs could then develop based on actual student training needs. At the end of the developmental period, programs would be analyzed in terms of the number of students placed in employment and the per-student training cost. These figures would then be reviewed in relation to known vocational training cost/benefit ratios (Conley, 1973) for the type of students being trained.

Recently, the Ministry of Education has declared adult special education to be a provincial priority program. This

designation not only indicates the important nature of these programs, it also provides for the stabilization of those funds that are allocated by the Ministry to enable them tc operate. Such action on the part of the Ministry is to be welcomed.

## VIII CONCLUSION

Like any other segment of society, mentally handicapped adults have a need for education throughout their adult life. This need is, in fact, far greater with mentally handicapped adults who, because of a delayed developmental pattern, often do not reach their fullest potential for learning until adulthood.

Many demonstration projects have shown that with appropriate education, the goals of employment in an integrated setting and independent living are realistic goals for adults with a mental handicap. The challenge currently facing the adult public education system is how to most effectively and efficiently provide mentally handicapped adults with the educational training they require.

A comprehensive career education system must be developed that addresses (a) the need of mentally handicapped adults to learn in non-traditional learning environments, (b) the variety of education needs demonstrated by mentally handicapped adults and (c) the involvement of other agencies and ministries in the vocational habilitation process.

Issuance of ministerial policy on the Provision of Adult Special Education Programs in the Public Education System of British Columbia in March, 1982, has confirmed the right of access of mentally handicapped adults to "appropriate learning opportunities" in public education institutions.

As more and more mentally handicapped adults gain access to appropriate education they will, in ever increasing numbers, develop the skills and behaviours required for full integration into society. The Ministry of Education, and subsequently the adult public education system, has an integral role to play in this integration process.

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## GLOSSARY

**BASIC EDUCATION:** General education in academic and practical skills that provides a basis for further education and successful functioning as an adult member of society.

**CAREER EDUCATION:** Any education or training which is embarked upon with a view to preparing one's self for a specific employment goal.

**COMPREHENSIVE CAREER EDUCATION SYSTEM:** A system that provides a sufficient range of service programs deployed in a co-ordinated fashion so that a student is able to obtain satisfaction of needs and continuity of service without having to move from the immediate region.

**LIFE-SKILLS TRAINING:** This type of training teaches skills which allow a person to function more independently in everyday life. Skills taught include: communication skills, personal management skills, personal health care, interpersonal skills, home management skills, leisure skills (Alternative Route DACUM chart, 1978).

**WORK ADJUSTMENT TRAINING:** This type of training encompasses both pre-vocational skill training and career awareness training and provides instruction in work-related behaviors and an awareness of the requirements of work.

**VOCATIONAL SKILL TRAINING:** This type of training teaches skills that can be used to produce something of worth to an employer (i.e. marketable skills).

**JOB STABILIZATION:** Refers to the time and services required to assist a mentally handicapped adult to function independently in a job at a performance level required by an employer.

**JOB PLACEMENT:** Procurement of a paying job and the successful matching of that job to an individual.

# END

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